

ADEX MINING REPORTS INDIUM, ZINC AND TIN PRODUCTION OPTIONS FOR MOUNT PLEASANT NORTH ZONE

Toronto – December 9, 2009 – Adex Mining Inc. (“Adex” or the “Company”) (TSX-V: ADE) is pleased to announce the results of a new Preliminary Assessment (“PA”) on its wholly-owned Mount Pleasant Mine Property (“Mount Pleasant” or the “Property”) located in southwestern New Brunswick, Canada. Mount Pleasant is the site of a past-producing tungsten-molybdenum underground mining operation, which operated during the 1980s. This PA is a preliminary technical and economic assessment of the production of tin, indium and zinc products from the North Zone (“NZ”) of the Property.

The results of the PA indicate that there are two viable production options for the NZ, including the production of tin concentrate, indium sponge and zinc metal and the production of tin concentrate and zinc-indium concentrate. Based on a 10-year project life and production rate of 850 tonnes per day (“tpd”), the PA shows pre-tax internal rates of return (“IRR”) for the tin concentrate, indium sponge and zinc metal production option and the tin concentrate and zinc-indium concentrate production option of 28.87% and 23.49% respectively as shown in the table below.

| | Option 1 Production of Tin Concentrate, Indium Sponge and Zinc Metal | Option 2 Production of Tin Concentrate and Zinc-Indium Concentrate |
|--|---|---|
| Pre-tax IRR | 28.87% | 23.49% |
| After-tax IRR | 23.94% | 19.30% |
| After-tax Net Present Value (“NPV”) (discounted at 8%) | \$54.2 million | \$21.5 million |
| Pre-production capital | \$71.1 million | \$41.2 million |
| Production rate | 850 tpd | 850 tpd |

“These are exciting times for Adex,” said Errol Farr, President and CEO of Adex. “The PA results reinforce Adex’s plans for piloting the concentrate and metals flowsheets as a next phase leading to definitive feasibility and production. The NZ development is an integral part of Adex’s overall strategy for producing tin, indium, zinc, tungsten and molybdenum from the resources at the Property.”

NZ production is based on the economic assessment of the resource over a 10 year mine life, and on conceptual mining and metallurgical processing methods as well as end-user standard revenue agreements. The PA indicates that the in situ outlined mineable blocks total 2,894,579 tonnes grading 0.76% tin, 191 grams per tonne (“gpt”) indium, and 1.91% zinc. The actual production rate of 850 tpd was determined by applying a 10% dilution factor with 85% mining extraction.

Results from previously completed metallurgical test programs characterizing the recovery of tin, indium and zinc from the NZ resource were used to design a conceptual process flowsheet using flotation and gravity separation. A dynamic process simulation and economic model was used to assess the economic potential of the resource by varying tonnage, grade and prospective revenue generation for value-added products. Value-added products to be produced on site include indium sponge and zinc metal from chloride hydrometallurgy.

The PA is considered to be accurate within minus 10% to plus 35% on the basis of the:

- purchase of new and refurbished equipment;

- installation costs defined by factored estimates relative to industry trends;
- local labour and power rates and budget fuel and reagent costs;
- mining costs based on use of new equipment;
- minimum refurbishment of existing infrastructure, including the mine access adit, processing buildings and facilities, electrical services, and process, potable and fire water distribution systems, and:
- product revenue determined from standard smelter off-take agreements (smelter schedules) and published metal pricing for a three year average up to the second quarter 2009.

The preliminary NZ technical/economic assessment including site administration, mining, processing, environmental management and product marketing is summarized below for the two processing options. Each model includes zinc flotation followed by tin flotation.

Option 1 - Production of Tin Concentrate, Indium Sponge and Zinc Metal

Tin concentrate is produced using a combination of flotation and gravity separation. The process is well documented from testwork completed on samples of mineralized rock from the NZ by Cominco Engineering Services Ltd. ("CESL") and Lakefield Research (now SGS) during the 1990's.

Optimum process chemistry for the hydrometallurgical processing of zinc concentrate is being defined by bench scale studies prior to piloting. High-grade indium sponge and zinc metal are the target products, which rely on a combination of leaching, solvent extraction and impurity precipitation stages.

Option 2 - Production of Tin Concentrate and Zinc-Indium Concentrate

Tin and zinc concentrate production are commercially proven process technologies. The economics of the concentrate option are sensitive to the net smelter return for indium contained in a zinc concentrate, which conceptually could be 0.49% (4900 gpt) indium. A conservative indium pay factor of 15% yields the results disclosed in this assessment.

Metallurgical and hydrometallurgical test programs designed to verify the selected process technology, discussion with various zinc smelters regarding revenue generation from zinc/indium concentrate, and discussion with indium metal producers are currently ongoing. Adex has also opened dialogues regarding tin concentrate sales with metal traders and off-shore tin smelters.

The PA includes a review by Trevor Boyd, P. Geo., the Company's Geological Consultant and a qualified person as defined by National Instrument 43-101 ("NI 43-101"), of the NI 43-101 compliant mineral resource estimate for the NZ completed by Watts, Griffis and McOuat Limited ("WGM"), Consulting Geologists and Engineers, and SGS-Geostat Limited ("SGS") in May, 2009, a mine plan provided by Andrew Hara, P. Eng., Senior Mining Engineer of Hara Mining Enterprises Inc., a qualified person as defined by NI 43-101, and an economic assessment of process alternatives, market evaluation, and environmental management technology completed by Dean Thibault, P. Eng., Senior Process Chemical Engineer of Thibault & Associates Inc., a qualified person as defined by NI 43-101. Dean Thibault, P. Eng., Senior Process Chemical Engineer of Thibault & Associates Inc., an independent qualified person and consultant to Adex, is preparing a NI 43-101 compliant Technical Report with respect to the PA which Adex will file on SEDAR within 45 days of today's date.

The mineral resource estimate for the NZ is contained in a Technical Report, entitled “A Technical Review of the Mount Pleasant Property, Including a Mineral Resource Estimate on the North Zone, Southwestern New Brunswick for Adex Mining Inc.”, dated May 6, 2009 and completed by Paul Dunbar, P.Geol. Senior Associate Geologist of WGM and Robert de l’Etoile, Eng. Senior Geological Engineer of SGS, which is available on SEDAR at www.sedar.com. Details of this NI

| Sub-Zones | Tonnes | % Sn | g/t In | g/t In Capped | % Zn | % As | %WO ₃ | %MoS ₂ | % Cu | % Bi |
|------------------------|-------------------|-------------|-------------|------------------|-------------|-------------|------------------|-------------------|-------------|-------------|
| Indicated | | | | | | | | | | |
| Deep Tin | 5,006,000 | 0.39 | 101.0 | 95.2 | 0.86 | 1.25 | 0.08 | 0.06 | 0.14 | 0.08 |
| Endogranitic | 4,336,000 | 0.55 | 21.8 | 20.3 | 0.28 | 0.85 | 0.12 | 0.06 | 0.10 | 0.09 |
| Upper Deep Tin | 838,000 | 0.22 | 102.8 | 94.9 | 1.36 | 0.76 | 0.08 | 0.06 | 0.07 | 0.05 |
| #4 Tin Lode | 702,000 | 0.25 | 74.1 | 74.1 | 1.00 | 0.19 | 0.01 | 0.01 | 0.09 | 0.00 |
| Total Indicated | 10,882,000 | 0.43 | 67.8 | 64.0 | 0.67 | 0.98 | 0.09 | 0.06 | 0.11 | 0.08 |
| Inferred | | | | | | | | | | |
| #1-3 Tin Lode | 2,345,000 | 0.18 | 76.8 | 73.5 | 1.08 | 0.28 | 0.02 | 0.03 | 0.09 | 0.01 |
| #5 Tin Lode | 1,267,000 | 0.15 | 115.4 | 111.3 | 1.50 | 0.70 | 0.07 | 0.04 | 0.08 | 0.03 |
| North Adit | 3,076,000 | 0.27 | 62.1 | 62.1 | 0.83 | 1.16 | 0.09 | 0.06 | 0.09 | 0.07 |
| North W-Mo | 915,000 | 0.26 | 54.3 | 49.8 | 0.58 | 1.14 | 0.25 | 0.12 | 0.12 | 0.10 |
| Total Inferred | 7,603,000 | 0.22 | 74.6 | 72.3 | 0.99 | 0.80 | 0.08 | 0.05 | 0.09 | 0.05 |

43-101 compliant mineral resource estimate are as follows:

For the purposes of this review, a total of 97 high grade Sn-In-Zn blocks of mineralization from the surface to 250 metres depth were identified from within the NZ indicated and inferred resources and compiled on sections and subsequently modelled into GEMCOM solid models. The total undiluted and diluted estimates of the blocks are presented in the following chart.

| Total All Blocks | Tonnes | % Sn | g/t In | % Zn | % Cu | % Pb | % As | % Bi | % WO ₃ | % Mo |
|------------------------------|------------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|-------------------|-----------|
| Undiluted | 2,894,579 | 0.76 | 191 | 1.90 | 0.23 | 0.04 | 1.49 | 0.07 | 0.10 | BD |
| 10% Dilution Material | 289,458 | 0.17 | 96 | 0.95 | 0.12 | 0.02 | 0.74 | 0.04 | 0.05 | BD |
| Diluted | 3,184,037 | 0.71 | 183 | 1.82 | 0.22 | 0.04 | 1.42 | 0.07 | 0.09 | BD |
| 85% Mining Extraction | 2,706,432 | 0.71 | 183 | 1.82 | 0.22 | 0.04 | 1.42 | 0.07 | 0.09 | BD |

BD – below detection.

Fire Tower Zone

Mount Pleasant’s tungsten/molybdenum sector of the Property, called the Fire Tower Zone (“FTZ”), was positively identified as a viable production opportunity in an Aker Solutions 2008 scoping study. Capital expenditures for that study depended entirely on new equipment purchases rather than the new/used mix which is proposed for the NZ. The scoping study of the FTZ is summarized in an NI 43-101 compliant Technical Report, entitled “A Technical Review of the Mount Pleasant Property, Including an updated Mineral Resource Estimate on the Fire Tower Zone, Southwestern New Brunswick for ADEX Mining Inc.” dated December 1, 2008 and completed by Paul Dunbar, M.Sc., P.Geol. Senior Associate Geologist of WGM, Dorota A. El-Rassi, M.Sc., P.Eng., Geological Engineer of SRK Consulting and John S. Rogers, P.Eng., of Aker Metals, a division of Aker Solutions Canada Inc., which is available on SEDAR at www.sedar.com.

“The Fire Tower Zone scoping study plus North Zone PA confirm the potential for a unique multi-metal production opportunity for Adex,” Mr. Farr continued, “which includes simultaneous commercial production of tungsten and molybdenum products from the Fire Tower Zone, and tin, indium and zinc products from the North Zone.”

The PA and the economic analyses contained therein are preliminary in nature and contain inferred mineral resources that are considered too speculative geologically to have economic

considerations applied to them that would enable them to be categorized as mineral reserves and there is no certainty that the results of the PA will be realized with more detailed work. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Qualified Persons

Trevor Boyd, P. Geo. the Company's geological consultant, and a qualified person as defined by NI 43-101, supervised the preparation of the technical information regarding the mineral resource estimate at the Property contained in this press release in compliance with NI 43-101. Andrew Hara, P. Eng., of Hara Mining Enterprises Inc., a consultant to Adex and an independent qualified person as defined by NI 43-101, supervised the preparation of the technical information regarding mining contained in this press release in compliance with NI 43-101. Dean Thibault, P. Eng., Senior Process Chemical Engineer of Thibault & Associates Inc., a consultant to Adex and an independent qualified person as defined by NI 43-101, supervised the preparation of the technical information regarding process design and all associated engineering work leading to mineral and metal production contained in this press release in compliance with NI 43-101.

ABOUT ADEX

Adex Mining Inc. is a Canadian junior mining company with an experienced management team. The Company is focused on developing its flagship Mount Pleasant Mine property, a multi-mineral project that is host to promising tungsten-molybdenum and tin-indium-zinc-copper mineralization. Located in Charlotte County, New Brunswick, the Mount Pleasant Mine property is situated approximately 80 kilometres south of Fredericton, the provincial capital, and is 65 kilometres from the United States border. The common shares of Adex trade on the TSX Venture Exchange under the stock symbol "ADE." Technical and business information regarding Adex's Mount Pleasant property is available on SEDAR at www.sedar.com and the Company's website www.adexmining.com.

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Certain statements in this press release may constitute "forward-looking" statements which involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements of Adex, its subsidiary or the industry in which they operate to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. When used in this press release, the words "estimate", "believe", "anticipate", "intend", "expect", "plan", "may", "should", "will", the negative thereof or other variations thereon or comparable terminology are intended to identify forward-looking statements. Such statements reflect the current expectations of the management of Adex with respect to future events based on currently available information and are subject to risks and

uncertainties that could cause actual results, performance or achievements to differ materially from those expressed or implied by those forward-looking statements. These risks and uncertainties are detailed from time to time, including, without limitation, under the heading "Risk Factors", in reports filed by Adex with the Alberta, British Columbia and Ontario Securities Commissions which are available at www.sedar.com and to which readers of this press release are referred for additional information concerning Adex, its prospects and the risks and uncertainties relating to Adex and its prospects. New risk factors may arise from time to time and it is not possible for management to predict all of those risk factors or the extent to which any factor or combination of factors may cause actual results, performance and achievements of Adex to be materially different from those contained in forward-looking statements. Although the forward-looking statements contained in this press release are based upon what management believes to be reasonable assumptions, Adex cannot assure investors that actual results will be consistent with these forward-looking statements. Given these risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results.

The forward-looking information contained in this press release is current only as of the date of the press release. Adex does not undertake or assume any obligation to release publicly any revisions to these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events, except as required by law.

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